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C-A OPERATIONS PROCEDURES MANUAL

15.10.2.1 Procedure for Making the Test EBIS High Voltage Area Safe
for Entry (HVP-20061130)

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Hand Processed Changes

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Approved: _____
Signature on File
Collider-Accelerator Department Chairman _____
Date

E. Beebe

15.10.2.1 Procedure for Making the Test EBIS High Voltage Area Safe for Entry (HVP-20061130)

The purpose of this procedure is to assure that the HV platform is properly grounded before access to the gated Test EBIS area is allowed. (The unshielded 5 Tesla superconducting solenoid can remain energized even though the high voltage hazard is removed).

- A) Only personnel authorized in this procedure are allowed to *secure* the area for subsequent entry by authorized or escorted unauthorized personnel.
- B) After the ground stick is attached, up to 10 persons (including at least one authorized person) may enter the enclosure for routine operational and debugging purposes.
- C) Permanent ground strap installation is required for maintenance or repairs as outlined in paragraph 6 below, or if more than 10 persons will enter the caged area enclosing the Test EBIS.
- D) **Authorization is required to enter the Test EBIS gated enclosure:**
In order to become an *Authorized User* and use this procedure, personnel must be designated by J. Alessi or E. Beebe and read, sign and date this document below. The designator must initial the signature in the space provided to validate the authorization. Reading and signing "Interim Magnetic Field Safety Plan for EBTS (Test EBIS) Super Conducting Solenoid" is a prerequisite for signing this procedure. Authorized users may enter the enclosure unescorted once the ground stick has been installed.

Unescorted entry into the gated area by users not authorized by this procedure is allowed only when the permanent ground strap has been installed by an authorized user.

Procedure (HVP-20061130):

1. Follow the “EBIS. High Voltage Pulsing Supply - Turn on/Turn off Procedure”, if necessary, to de-energize the platform.
2. Verify that the HV lights are off and the Ross (HV Shorting relay) is in the down (shorted) position.
3. Use Kirk key “B” to open the gate to the high voltage enclosure.
4. Use the long shorting stick, located at the gate, to insure that the EBIS platform is grounded. First touch to EBIS with the tip of the stick, (which has a resistor to ground), then with the hook.
5. **Secure the enclosed area for entry for routine operation and debugging:** Hang the ground stick on the EBIS and snap the handle into the fixture provided. The Test EBIS enclosure is now secure for routine operational access by up to 10 users, one of which must be authorized.
6. **Permanent Bonding for maintenance:** When maintenance is to be performed on the EBIS or more than 10 people will enter the enclosure, the permanent ground strap provided shall be attached to the EBIS frame at the position labeled “Bonded Ground.” Maintenance includes filling of the source with cryogens, opening power supply racks, removing electrical feedthrough covers on the EBIS, or dismantling the vacuum system. The non-magnetic wrench hanging on the fence near entrance gate shall be used for this purpose. The grounding strap is labeled “permanent ground strap” and located at the insulating ceramic foot closest to the gate with one end soldered to the laboratory copper ground plane.

Authorized Personnel List (HVP-20061130):
(Procedure for Making the Test EBIS High Voltage Area Safe for Entry)

Name: _____ Designator Initials: _____

Signature _____ Date: _____

Date _____

Name: _____ Designator Initials: _____

Signature _____ Date: _____

Date _____

Name: _____ Designator Initials: _____

Signature _____ Date: _____

Date _____

Name: _____ Designator Initials: _____

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